

Garry Kitchen's

# GameMaker™



*The  
Computer  
Game  
Design  
Kit™*

*For  
Commodore  
64™/128™  
Computers*

**QUICK  
REFERENCE  
BOOKLET**

**ACTIVISION**  
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# *GameMaker™ Quick Reference Booklet*

Below are brief descriptions of all the commands used in each of the parts of the GameMaker program. Keep this list for handy reference when using GameMaker.

## *GameMaker Editor Commands*

### *Master Commands*

- menu:** Goes to the GameMaker Main Menu.
- file:** Handles filing jobs. These are:
- quit:** Go back to the Editor.
  - load:** Load program from disk.
  - save:** Save program on disk.
  - init:** Initialize disk.
  - del:** Delete a file on disk.
  - make-a-disk:** Save program on disk for yourself or a friend.
  - prnt:** Print file in Program Area.
- clr:** Clear Program Area.
- run:** Run program in Program Area.
- ins:** Insert line at cursor in Program Area.
- del:** Delete line at cursor in Program Area.
- find:** Find designated label.
- copy:** Copies, moves or deletes program lines.

## *SceneMaker*

### *SceneMaker Commands*

- file:** Same as Editor **file** commands.
- quit:** Go to Editor.

**undo:** Undoes last major change.

**clear:** Clear **entire** drawing board.

### *Drawing Modes*

**draw:** Draw lines

**circl:** Set two points for radius of circle.

**line:** Set two points for line.

**box:** Set two points for far corners of box.

**fill:** Use with other modes. Fills marked-off area with selected color.

**zoom:** Magnify area on Drawing Board.

**copy:** Copy areas of scene.

**view:** Hide commands and work on entire screen.

**move:** Move sections of scene into view.

## *SpriteMaker*

### *SpriteMaker Commands*

**file:** Same as Editor **file** commands.

**setup:** Choose **single** or **multi-colored** sprites, **v mag**, **h mag**, and set number of sprites.

**quit:** Go back to Editor.

**spr = 01:** Select part of sprite on which to work.

**fr = 01:** Select frame on which to work.

**cmd:** Present animation commands. These are:

**flip:** Move joystick to turn sprite.

**anima:** Animate from 00 to 00 frames.

**shift:** Move sprite positions in Positioning Area.

**clear:** Erase **all** frames of sprite.

**copy:** Copy one sprite or one frame to another.

# *SoundMaker*

## *SoundMaker Commands*

- quit:** Go to Editor.
- ins:** Insert frame into sound effect.
- del:** Delete current frame.
- copy:** Copies frame from one to another.
- clr:** Erase **all** frames.
- file:** Same as Editor **file** commands.

## *Master Controls*

- repeats:** Repeat sound.
- equalizer:** Filter high, medium and low frequency ranges.
- volume:** Set volume for sound effect.
- speed:** Set speed of sound effect.
- frame:** Select frame to edit.

## *SoundMaker Controls*

- wave:** Select **noise, square, sawtooth, or triangle.**
- att:** Change speed of volume increase at beginning of frame.
- dec:** Change volume decrease after attack.
- rel:** Control speed of sound fade.

<b>frq:</b>	Control high and low pitch.
<b>spd:</b>	Change speed of frequency sweep.
<b>pls:</b>	Determine <b>square</b> wave width.
<b>dur:</b>	Determine amount of time level is maintained after decay, before release.
<b>tie:</b>	Create a smooth transition between frames.

### *Hearing Sound Effects*

<b>hear sound:</b>	Hear entire sequence of sounds.
<b>hear frame:</b>	Hear current frame.
<b>constant:</b>	With <b>hear sound</b> and <b>hear frame</b> , repeat entire sound or frame.
<b>quiet:</b>	Stop sound.

## *MusicMaker*

### *MusicMaker Commands*

<b>file:</b>	Same as Editor <b>file</b> commands.
<b>quit:</b>	Go to Editor.
<b>ins:</b>	Insert note between two others. Turn on or off.
<b>top:</b>	Go to first note in song.
<b>del:</b>	Delete note in song.
<b>play:</b>	Play song.
<b>clr:</b>	Clear Music Sheet of <b>all</b> notes.
<b>stop:</b>	Stop playing song.
<b>1, 2, 3:</b>	Channel display selectors. Instrument selections include flute, piano, saxophone, etc.

**scrolling arrows:** Select to move forward or backward in a song.

**tie:** Make notes flow smoothly. Turn on or off.

**tempo:** Change speed of song.

## *GameMaker Program Commands*

The following is a “quick reference” to all the GameMaker program commands—in alphabetical order.

**add 0000 to score1**—add value from 10 to 1000 to score #1 or 2.

**add 0000 to score [a]**—add value from 10 to 1000 to score specified by [a].

**add [a] to score1**—add value in [a] to score #1 or 2.

**add [a] to score[a]**—add value in [a] to score specified by [a].

**clear scene 1**—Erase information in specified scene and clear colors to black.

**clear score1**—Set specified score to 000000 and print on screen at specified location (see **score at. . .** and **score color. . .** commands).

**clear score[a]**—Set score specified by [a] to 000000 and print on screen.

**clear sprite**—Make designated sprite invisible by positioning off edge of screen. Use when changing from one sprite to another or moving it at same time.

**/ comment**—Holds 25 characters of typewritten information to explain particular area of program.

**data table at l001**—Tell computer location of current data table. Numbers are read from list using **set a = value at data + [a]** command.

**data values-000 000**—Holds values in data table. Enter two values per instruction. Values are read from left to right.

**display other scene**—Switch scene from current scene to other scene.

**display scene 1**—Switch screen to specified scene.

**endif**—Mark end of logical if function.

**if . . . then**—Mark beginning of logical if function.

if statements available:

**if a = 000 then**

**if a = [a] then**

**if a > 000 then**

**if a > [a] then**

**if a < 000 then**

**if a < [a] then**—Affect program flow based on comparison of variable “a” and a number “000” or a variable “a” and another variable “[a]”.

**if button 1 is on then**—Affect program flow based on whether joystick button is on or off. If program uses **button 1** statement, use space bar to go to Editor.

**if joystick 1 is right then**—Affect program flow based on direction of joystick #1 or 2. Joystick can be **left, right, up, down, or off**.

**if score 1 > 000000 then**—Test if current value of **score 1** or **2** is greater than number specified. Select from **1000** to **100000** by 1,000's.

**if score[a] > 000000 then**—Test if current value of score pointed to by a variable is greater than a number.

**if score 1 > score2 then**—Test two score values against each other.

**if sprite hit sprite then**—Test if sprite is colliding with other graphic on screen. Select **sprites 1-8, anyone** or **clr 2/3**.

**jump to label l001**—Cause program to jump to designated label.

**jump to label l[a]**—Jump to label designated by variable [a].

**jump to subroutine at l001**—Jump to subroutine at designated label.

**jump to subroutine at l[a]**—Jump to subroutine at label designation by value in [a].

**otherwise**—Tell computer to execute commands after **otherwise** and before next **endif if** expression in preceding **if . . . then** statement *was false*.

**pause for 00.0 seconds**—Cause program to wait before moving on to next command.

**plot a dot at x = 000 y = 000**—Plot high resolution pixel (short for picture element) on scene picture.

**plot a dot at x = [a] y = [a]**—Plot dot at coordinate values designated by variables.

**plot color 0 to scene 1**—Designate color and destination scene used by plot command. Select **scene colors 0 1, 2, or 3**.

**plot color[a] to scene 1**—Designate by variable color used by plot command.

**print \_\_\_\_\_**—Print 20 characters on screen at position selected by **print at row 00 column 00** command in colors selected by **print color = 00 on 00** command.

**print at row 00 column 00**—Tell computer destination of next **print** statement.

**print at row [a] column [a]**—Designate destination of next **print** statement with variables.

**print character of [a]**—Print character specified by variable [a].

**print color = 00 on 00**—Designate foreground and background colors of next characters to be printed.

**print color = [a] on [a]**—Designate by variable colors used by print command.

**print on scene1**–Designate which screen program should print to on next **print** statement. Select **scene1**, **scene2**, or **both**.

**print value of [a]**–Print 3 digit numeric value of variable.

**return from subroutine**–Return to instruction immediately following earlier executed **jump to subroutine at 1001**.

**scene 1 background = black**–Select background color (color 0) for designated scene.

**scene background 1 = [a]**–Select background color as above based on value of variable **[a]**.

**scene 1 border = black**–Select color of border around designated scene from list of available colors.

**scene 1 border = [a]**–Select color of border based on value of variable **[a]**.

**scene 1 color 1 = black**–Select colors for **scene 1**, overruling colors used in **SceneMaker**.

**scene 1 color 1 = [a]**–Select colors for **scene 1** based on value of variable **[a]**.

**scene 1 is [ ]**–Load scene into memory of computer. The disk with desired scene should be in disk drive.

**scene 2 color 1 = black**–Select colors for **scene 2**, overruling colors used in **SceneMaker**.

**scene 2 color 1 = [a]**–Select colors for **scene 2** based on value of variable **[a]**.

**score1 at row 00 column 00**–Designate position at which score #1 will be displayed.

**score2 at row 00 column 00**–Designate position at which score #2 will be displayed.

**score1 color = 00 on 00**–Designate foreground and background colors for score #1.

**score2 color = 00 on 00**—Designate foreground and background colors for score #2.

**score1 displays on scene1**—Selects on which scene (or scenes) designated score will be displayed. Select **scene1**, **scene2**, or **both**.

**screen update on**—**Screen update on/off** turns off visible changes to display, executes any display instructions, turns on and displays changes instantly.

**set a = 000**—Set value of designated variable equal to a number from 000 to 255.

**set a = [a]**—Set value of designated variable equal to value of another variable.

**set a = a + a**—Add selected number to value in **a**.

**set a = a + [a]**—Add value of a variable to value in **[a]**.

**set a = a - 000**—Subtract selected number from **a**.

**set a = a - [a]**—Subtract value of a variable from **a**.

**set a = a \* 000**—Multiply value in variable by selected number.

**set a = a \* [a]**—Multiply value in variable by value in another variable.

**set a = a / 000**—Divide value in variable by selected number.

**set a = a / [a]**—Divide value in variable by value in another variable.

**set a = rnd number from 0 to 000**—Set designated variable equal to a random value from 0 to selected value.

**set a = sprite x position**—Set designated variable equal to current value of selected sprite's x position on screen.

**set a = sprite y position**—Set designated variable equal to current value of selected sprite's y position on screen.

**set a = value at data + [a]**—Set designated variable equal to value in data table pointed to by **[a]**.

**set a = value at ram + [a]**–Set designated variable equal to value in user RAM table.

**set value at ram + [a] = 000**–Set value in RAM data table pointed to by variable equal to selected number.

**set value at ram + [a] = [a]**–Set value in RAM data table pointed to by first variable equal to value of second variable.

**skip next if a = 000**

**skip next if a > 000**

**skip next if a < 000**–Skip next instruction in program if mathematical expression is true. This command can be used in place of an **if. . .then** command for simple testing of variables.

**song is [ ]**–Load a song. The disk containing song should be in disk drive.

**song volume = 00**–Select volume for music in your program. The values are from **00 (off)** to **15 (loudest)**.

**sound channel 1 = [ ]**–Select sound effect to be executed on designated channel.

**sound channel 1 off**–Shut off current sound on designated channel. It will not affect music playing on that channel.

**sprite 1 is [ ]**–Assign selected sprite (1-8). The disk containing sprite should be in disk drive.

**sprite animates always**–Select **sprite animates always** to cycle from frame 1 to end over and over. Select **sprite animates once** for sprite to go through animation sequence once and stop.

**sprite animation spd = 000**–Select a speed of animation for designated sprite.

**sprite animation spd = [a]**–Set animation speed for designated sprite equal to value of variable.

**sprite color 1 = black**–Designate new color #1 for selected sprite, overriding color that sprite was drawn with in **SpriteMaker**.

**sprite color 1 = [a]**—Set color #1 for selected sprite equal to value in variable, overriding color that sprite was originally drawn with.

**sprite dir = 000 000**—Set direction of selected sprite equal to a value between **000** and **255**.

**sprite dir = [a]**—Set direction of selected sprite equal to value in designated variable.

**sprite movement speed = 000**—Set movement speed of selected sprite.

**sprite movement speed = [a]**—Set movement speed of selected sprite equal to value of designated variable.

**sprite shared colr2 = black**—Set designated sprite shared color equal to selected color.

**sprite under colrs 2/3**—Select display priority of designated sprite with scene graphics. Select **under** or **over** scene colors 2 and 3.

**sprite x position = 000**—Position selected sprite on screen at designated horizontal position.

**sprite x position = [a]**—Position selected sprite on screen at horizontal position designated by value of variable **[a]**.

**sprite y position = 000**—Position selected sprite on screen at designated vertical position.

**sprite y position = [a]**—Position selected sprite on screen at vertical position designated by variable **[a]**.

**stop program**—Stop execution of program. A blank line in your program is equivalent to **stop program** command.

**trace of [a] on**—Select trace mode of program execution. Either turn **on** or **off** trace mode. When a **trace of [a] on** instruction is executed, program 1) stops at next instruction, 2) displays command's text at bottom of screen, 3) places program in single step mode, and 4) displays current contents of variable designated in trace instruction.

NOTES

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